



HOMŒOPATHIC PHARMACY DEMONSTRATED.

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To understand homœopathy, it is as necessary to understand the mode of preparing the medicines, in this as any other practice of medicine, and even more so, for this is the "pathy" which makes loudest pretentions of having *specifics*.

The table No. 1, is on the plan of Hahnemann and it is the one now admitted by the practicing homœopathists, sometimes called the *centigrade potentization*.

Probably it may be as clearly and fairly expressed in B. F. Joslin's Address before the New York Homœopathic Society, March 9th, 1847. He says:—

"Believing that theoretical objections prevent many from testing Hahneman's potencies, I shall attempt to give a *theory of Potentization*. My view expressed in the most general terms, is that Hahnemann's process develops the power of a drug by affecting a comminution, and in no other way. This is the whole secret of that incredible power which experience proves his preparation to possess. Trituration and mixture with saccharum lactis promote this development just so far as they promote comminution and no farther. The successive steps of centigrade dilution promotes this, by subjecting every particle of the medicinal substance to the mechanical tearing-asunder operation of the non-medicinal one.

"One man can by Hahnemann's process, in a single day effect a greater comminution of a substance, than could have been effected in a direct mixture and trituration, by the combined labor of the whole human race, continually operating since the creation of Adam.

"The labor that built the pyramids is nothing compared to

that of preparing even the eighteenth potency by such a process. That is, by thoroughly triturating one grain with a sextillion of grains. To triturate one grain of medicinal powder with ninety-nine grains of a hard inert powder, effects not merely a wider separation of its original component masses, but a *division* of those masses, and a division more minute than would be practicable by any amount of trituration of the medicinal powder per se. In subjecting one grain of the resulting powder to a similar operation with ninety-nine grains of saccharum lactis in order to obtain the second trituration, we render the group of medicinal molecules still smaller than in the first trituration. In forming still higher triturations, a reduction in size of the groups of medicinal molecules must be effected by each successive operation."

Now, here we have Hahnemann's *mode* of preparing medicine, but a different *theory* of potentization. He contended that the power of the person that shook the vials, or pulverized the medicine, passed from the individual into the medicine, which he termed spiritual or dynamic power, and he found it necessary to limit the shaking and pestling, or the medicine would become too powerful.

In this age of steam-power, and by which medicines are prepared, this theory had to be abandoned, for if it were true, that the power of an engine was imparted to the medicine in grinding and mixing, it might do great damage. Therefore, the theory of comminution was adopted. Mr. Joslin says, "to break a body into fragments increases its surface. This augments with every succeeding fracture. A pebble of a grain weight has an immense surface, when reduced to an impalpable powder by simple friction in a mortar.

"But were it converted into some of the high and inconceivably fine preparations by Hahnemann's process, the stony surface alone, independently of the sugar, might exceed the surface of the globe we inhabit."

This position contains a truism and an impossibility. 1st, It is true that breaking a body into fragments, increases its surface, but only about one-third at each simple division. 2nd, It is not true or even probable, that a grain of medicine mixed in the manner proposed, would divide into more than one hundred million parts on the 4th potency, for when a grain of this mixture is mixed with ninety-nine grains of fresh sugar of coarser particles, it would be shielded in the angular spaces, until the particles of sugar were broken as fine as the

medicine, and this practically would be the ultimum.

Here practically we have only the fourth potency or one grain mixed fourteen hogsheads of sugar.

Well might he say, if it were converted into the high preparations of Hahnemann, the *surface* of a grain would exceed the surface of this globe, because it takes a lump of sugar ten times as large as the globe to convert it into the fifteenth potency, and if the particles were equally distributed through the mass, a particle to each grain, it would exceed the surface many million times.

Now we have gone as far as the bounds of practicability, we will make some mathematical calculations, that we may comprehend the quantity of the different potencies, and the mass of sugar to prepare them. (See table Mo. 1.)

The first potency takes one grain of the medicine, and ninety-nine grains of sugar, making of the mixture one hundred grains, represented thus, 1-100 the numerator representing the medicine, and the denominator the mass.

The second potency requires one hundred times the first, and so on in geometrical progression, applicable to the sugar only, there being only one grain of the medicine in the whole series. This potency requires about one pound and a half, (lb. 1.428). The third, one hundred and forty-two pounds. The fourth, fourteen hogsheads (of one thousand pounds each.) The fifth, one thousand four hundred hogsheads. The sixth, one hundred and forty thousand hogsheads. The seventh, fourteen million hogsheads, which is about the product of the United States in fourteen years. The eighth, requires the product of fourteen hundred years. The ninth, one hundred and forty thousand years. The tenth, fourteen million years. The eleventh, one thousand four hundred million years. The twelfth would take a mass about as large as the planet Vesta. The thirteenth, about the size of Juno. The fourteenth, a mass as large as Vesta, Juno, Ceres, Pallas, Moon and Mercury. The Earth, Mars and Venus, and all the previous mentioned planets, will not make a mass sufficient for the fifteenth potency. The sixteenth potency requires a mass about as large as Saturn. The seventeenth potency requires a mass larger than all the thirteen planets named, added together. The eighteenth potency requires a mass seven times as large as the sun and all her planets. This is called the sextillionth potency or division of the medicine, and takes one figure more than compute the grains in the sun and handle

planets. Hahnemann's greatest power was the decillionth or thirtieth potency, or a unit with sixty cyphers annexed.*

(See table No. 2). The Sun is a mass the mind cannot comprehend without comparing it with other bodies. Its diameter is about nine hundred thousand miles, and contains a volume of matter equal to about one million and a half of globes the size of our earth.

Suppose it were a hollow sphere, and we place the earth and moon and Herschell, which is eighty one times larger than this earth, and La Verrier ninety times larger than this earth, Saturn eleven hundred times larger than this earth, and Jupiter about thirteen hundred times larger than this earth, all in its interior. They could all revolve in orbits and never be nearer each other than the moon to our earth, which is two hundred and forty thousand miles.

We have now reached the eighteenth potency and all the solar system is absorbed. If we wish to calculate the mass that it would require for the thirtieth potency, multiply the total number of grains in the solar system, (one hundred and forty thousand quintillions,) by the number of grains in the planet Vesta, (four quadrillions) and the product will be about half enough to mix one grain to the thirtieth potency.

The probabilities are, that we are using sugar containing more arsenic from the poisoning of rats than is in the sixth potency.

If a rat had been poisoned with arsenic, on a sugar plantation, fifty years ago, and there has been annually fourteen hogsheads of sugar produced, and it receives annually one hundredth part of a grain of arsenic, it has been and will be for fifty years to come, all of the fifth potency; therefore there is not much doubt that all the sugar used is at least of the fifth potency of arsenic.

But no fears need be entertained on that score, for each of us would have to swallow one hundred hogsheads, to get the fourteenth part of a grain of arsenic, which is a safe dose to give in common practice. Sugar honestly prepared to the fourth potency would not be injured as an article of food, as domestically used, and even the third might be used without any deleterious effect.

* Homœopaths use the English notation, that is a million involved to the tenth power, or a unit with sixty cyphers annexed, make a decillion. According to the French notation a thousand involved to the eleventh power, or a unit with thirty-three cyphers annexed make a decillion.

The preparation in liquid form is the most certain to be of equal dilution or to have the medicine most equally distributed through all parts of it. But to prepare the dilutions as Hahnemann, (which is to bring it to the third or fourth trituration with sugar, and then commence with a grain in ninety-nine drops of water, and shake, then take one drop of this last mixture and mix with ninety-nine more drops of water and shake as before, and so on for each potency,) will be very uncertain, because if we take any medicine either soluble or insoluble, and triturate with sugar to the third potency, and take one grain of this mass, the chances are one hundred against, to one in favor of there being one particle of the medicine in the grain selected; hence homœopaths have concluded that any medicine of the second or third trituration was soluble.

All the water flowing in the Ohio and Mississippi rivers from Pittsburgh and St. Louis, must be at least, of the twelfth potency of arsenic, from the poisoning of rats in those cities. Yet it takes one hundred and forty thousand hogsheads of arsenic thrown into the rivers annually to make the water of the fourth potency, which still will not be deleterious. If any more than this quantity should be thrown in, the inhabitants of cities using the river water will undoubtedly be apprised of it.

Suppose the waters surrounding this globe make up one thousandth of its mass, there then would be just enough water in all the oceans, lakes, rivers and atmosphere belonging to it, to prepare one grain to the thirteenth potency.

Now, it is a fact that homœopathic preparations when carried above the fourth or fifth potency, must be calculated mathematically, because practically they cannot be carried farther; and therefore it will not be expected here to discuss homœopathic therapeutics, or cast any reflection on your understanding, by speaking of the success of those *figurative potencies*, in removing diseases.

[illegible]

It is a general law that the planets decreasing in density, as their distance from the sun increases. According to recent experiments, the mean density of the earth is five, and forty four hundredths greater than water, [5.44]. By placing the mean density at five, it gives a specific gravity of three hundred pounds per cubic foot; and supposing this earth would cube seven thousand miles, it gives in round numbers one hundred thousand quadrillions of grains, or a unit with twenty-nine cyphers. Taking the density of the earth as a mean for all our solar system, the following table will show the amount in grains of each planetary body and their total magnitude.

Planet.	Grains.
Sun,.....	140,584,416,195,000,000,000,000,000,000,000
Jupiter,.....	128,981,000,000,000,000,000,000,000,000,000
Saturn,.....	110,054,000,000,000,000,000,000,000,000,000
Le Verrier or Neptune,.....	9,000,000,000,000,000,000,000,000,000,000
Hersehell or Uranus,.....	8,157,020,000,000,000,000,000,000,000,000
Earth,	100,000,000,000,000,000,000,000,000,000,000
Venus,.....	88,974,000,000,000,000,000,000,000,000,000
Mars,.....	15,123,000,000,000,000,000,000,000,000,000
Mercury,.....	5,339,000,000,000,000,000,000,000,000,000
Moon,.....	2,000,000,000,000,000,000,000,000,000,000
Pallas,.....	1,669,000,000,000,000,000,000,000,000,000
Ceres,.....	796,000,000,000,000,000,000,000,000,000
Juno,.....	543,000,000,000,000,000,000,000,000,000
Vesta,.....	4,000,000,000,000,000,000,000,000,000,000
Total,.....	140,840,822,663,000,000,000,000,000,000,000